

REMARKS

With respect to the requirement for a new oath or declaration, attached hereto is a true copy of a corrected oath or declaration as filed in the parent application serial No. 10/277,044 (now U.S. patent No. 6,689,296). It is respectfully requested that this new oath or declaration be accepted in this divisional application.

The claims were rejected under 35 USC 103 over Kano in view of Kawazu or Tanigami. This rejection is respectfully traversed.

The present invention relates to a method of producing window glass with defogging heat wires in which a conductive paste is applied in a predetermined pattern and baked. The conductive paste contains silver powder, a molybdenum compound, a glass frit and an organic vehicle. It is respectfully submitted that the claimed method is not taught or suggested in the art applied in the Office Action.

The Kano reference does, as the Examiner has noted, disclose the making of an auto glass defogger but fails to teach or suggest the use of any molybdenum material in the paste applied to the window glass. As a result, the Examiner has relied on two secondary reference to overcome this deficiency. It is respectfully submitted that they do not.

The Kawazu reference is asserted to be in an analogous art but applicants respectfully traversed that assertion. This reference relates to an electrode paste for a semiconductor substrate which is designed to trap oxygen preferentially and thereby control oxidation of the semiconductor substrate front face. See paragraph 0008. To accomplish this, a paste is employed which contains 100 weight parts of a silver powder and up to 10 weight parts of a metallic silicide powder which can be one of titanium, tantalum, nickel, zirconium, niobium, chromium, molybdenum and tungsten silicides. The Kano reference applies a paste to a window glass and not to a semiconductor substrate. There is no teaching or suggestion in Kano that the surface of the glass requires control of oxidation. There is, therefore, no reason or motivation to rely on any of the teaching of the Kawazu reference to modify what is disclosed in the Kano patent. The only way these

references can be combined is through the use of hindsight and that, of course, is improper.

The Office Action alleges that it would be an obvious to a person of ordinary skill in the art to incorporate the molybdenum compounds to benefit from improved conductivity, color and reduced oxidation of metallic components. The Kawazu reference does not support this assertion in any way to make it even arguably a justification for combining the reference with Kano.

The Tanigami reference likewise relates to a different art. It concerns a ceramic heater comprised of a heat generating composition which is suitable for use in home or in industry. The heat generating composition comprises an electrically conductive powder and a crystalizable glass frit. Included in the disclosure of usable electrically conductive powders are molybdenum silicide, molybdenum carbide and molybdenum boride. The reference further teaches that the composition can contain an additive which is at least one metal oxide powder and/or metal powder in which the metal can be selected from the group consisting of nickel, manganese, iron, bismuth, copper and silver. Of these, it is apparent that nickel powder is preferred. The addition of the metal oxide powder and/or metal powder is stated to result in a heater which exhibits both a low electrical resistance value and a low TCR value. This reference is thus the reverse of the Kano reference. It starts with a molybdenum containing material and adds a metal or metal oxide to lower electrical resistance. Kano, on the other hand, starts with an electrically conductive composition and then adds a molybdenum compound. There is no apparent reason, other than to advance the instant rejection by use of hindsight, to include a molybdenum compound in the Kano reference. If the addition of the conductive metal to a molybdenum containing composition as in Tanigami improves conductivity, it then follows that adding a molybdenum material to an electrically conductive metal composition would decrease conductivity. This is directly contrary to the hypothesized benefit (improved conductivity) of adding a molybdenum material in the current Office Action. The Office Action also proposes that adding the molybdenum compound would improve color and

reduce oxidation of metallic components but the Tanigami patent has no teachings or suggestions which support these assertions.


Both secondary references teach that molybdenum containing compositions exist but provide no teaching or suggestion or motivation to include a molybdenum compound in the Kano composition. It is therefore respectfully submitted that this rejection is based on hindsight and should be withdrawn.

Beyond the foregoing, claims 5, 12 and 17 (and claims 6-9, 13-16 and 18-10 which are dependent thereon) recite that the amount of the molybdenum compound is about 0.1 to 13 pph of the silver powder. Tanigami teaches a composition in which the electrically conductive powder, which could be a molybdenum silicide, is at least 30 weight percent of the mixture of the powder and the glass frit and the additive which can be a metal powder is up to about 12% of the entire composition. See col. 3, lines 18-22 and col. 5, lines 22-35. Thus, the amount of the molybdenum containing material would always be far in excess of the metal. Clearly, there is no teaching or suggestion to reduce the amount of the molybdenum compound content so that it is up to about 12 pph of the metal.

In light of all of the foregoing considerations, it is respectfully submitted that this application is now in condition to be allowed and the early issuance of a Notice of Allowance is respectfully solicited.

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Respectfully submitted,

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